

5. (Amended) A GPS receiver as defined in Claim 1, wherein the GPS unit outputs an updated ground speed signal at least every second.

9. (Amended) The regulator as defined in Claim 1, further comprising:
an operator input controller for varying a selected rate distributor for the agricultural dispenser, the operator input controller and the ground speed signal determining the frequency of the series of pulses.

11. (Amended) A regulator for outputting a signal to an agricultural dispenser for applying chemicals to a field or for planting seeds, the regulator comprising:

a GPS unit for outputting a ground speed signal indicative of the velocity of the agricultural dispenser in response to satellite signals;

a converter for converting the ground speed signal to a series of pulses having a frequency indicative of the ground speed signal and outputting the series of pulses to the agricultural dispenser;

the GPS unit and the converter being mounted on a self-propelled vehicle;
and

a wireline electrically interconnecting the converter with the dispenser positioned on a trailerable implement.

13. (Amended) A GPS receiver as defined in Claim 11, wherein the GPS unit outputs an updated ground speed signal at least every second.

16. (Amended) A method of outputting a ground speed signal to an agricultural dispenser for applying chemicals to a field or for planting seeds, the method comprising:

providing a GPS unit for outputting a ground speed signal indicative of the velocity of the agricultural dispenser in response to satellite signals;

converting the ground speed signal to a series of pulses having a frequency indicative of the ground speed signal; and

outputting the series of pulses to the agricultural dispenser.

21. **(Amended)** The method as defined in Claim 15, further comprising:
providing an operator input controller for varying a selected rate distribution for
the agricultural dispenser, the operator input controller and the ground speed signal
determining the frequency of the series of pulses.